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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/631,910   | 07/31/2003  | Hiroyuki Yanagisawa  | KON-1807            | 9630             |
| 20311  | 7590        | 10/10/2006           | EXAMINER            |                  |
| LUCAS & MERCANTI, LLP<br>475 PARK AVENUE SOUTH<br>15TH FLOOR<br>NEW YORK, NY 10016 |             |                      | CHEA, THORL         |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1752                |                  |

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/631,910

Applicant(s)

YANAGISAWA, HIROYUKI

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 25, 2006 has been entered.
2. Claims 1-12, 14-20 are pending in this instant application; claim 13 has been canceled.
3. The rejections in paragraphs 9-112 set forth in the Final Office Action on April 25, 2006 are withdrawn in view of the statement of common ownership in the response on June 26, 2006, and the Terminal Disclaimer submitted on June 26, 2006.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-12, 14-20 are rejected under 35 U.S.C. 103(a) as obvious over either EP 1278101 (EP'101), Nishijima et al (US Patent No. 6,699,649) or Patent Specification 1543266 (PS'266) in view of Yoshioka et al (US Patent No. 6,413,712).

EP'101, Nishijima et al and PS'266 each discloses a photothermographic material containing a reducing agent having formula with the scope of A-1 claimed, except the compound of formula A-4. See EP'101, Nishijima et al and PS'266 on page 15, formula (I) wherein R3 represent an aryl group ( a phenyl group or naphthyl group). Yoshioka et al disclose a compound of formula

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A-4 claimed in the present claimed which when used in combination with a bisphenols compound provide a photothermographic material affording a sufficient image density under general image producing conditions and capable of suppressing the time-dependent tint of the white background after development processing. See column 2, lines 12-18 and formula (II). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phenol compound taught in Yoshioka et al in the material of either EP'101, Nishijima et al or PS'266 with an expectation of achieving a photothermographic material affording a sufficient image density under general image producing conditions and capable of suppressing the time-dependent tint of the white background after development processing, and thereby provide a material as claimed. The regression value as claimed is considered as inherent to the combination of reducing agent stem obtained by the combination of those taught in the applied prior art of record after the image forming process since the combination of the bisphenols reducing agent and the phenol compound taught in Yoshioka et al provide a sufficient density and suppressing the time depend tint of the white back ground after processing, and the regression value present in the claimed invention is related to the control of color tone of the material after processing.

6. Claims 1-12, 14-20 are rejected under 35 U.S.C. 103(a) as obvious over the combination of Oya et al (US Patent No. 6,376,166) and Yoshioka et al (US Patent No. 6,413,712).

Oya discloses photothermographic material having a reducing agent within the scope of the claimed invention. See compound of formula (I) in the abstract and the definition of  $V^9$  in column 7, lines 55-60 which an aryl group such as phenyl, p-methylphenyl and naphthyl, except the compound of formula (A-4). Yoshioka et al disclose a compound of formula A-4 claimed in

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the present claimed which when used in combination with a bisphenols compound provide a photothermographic material affording a sufficient image density under general image producing conditions and capable of suppressing the time-dependent tint of the white background after development processing. See column 2, lines 12-18 and formula (II). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phenol compound taught in Yoshioka et al in the material of Oya et al with an expectation of achieving a photothermographic material affording a sufficient image density under general image producing conditions and capable of suppressing the time-dependent tint of the white background after development processing, and thereby provide a material as claimed. The regression value as claimed is considered as inherent to the combination of reducing agent obtained by the combination of those taught in the applied prior art of record after the image forming process since the combination of the bisphenols reducing agent and the phenol compound taught in Yoshioka et al provide a sufficient density and suppressing the time depend tint of the white back ground after processing, and the regression value present in the claimed invention is related to the control of color tone of the material after processing.

#### ***Response to Arguments***

7. Applicant's arguments filed June 26, 2006 have been fully considered but they are not persuasive of the reason set forth in the Final Office Action on April 25, 2006. The present invention is related to the combination of known reducing agent for silver ion that have been known and disclosed in the applied prior art of record. The applicants appear to argue that the reducing agent may have been known in the art, but the material contains such reducing agents and have a coefficient of determination  $R^2$  of the regression line is from 0.998 to 1.0 provide an

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improved results such as image quality and physical evaluation such as demonstrated in the Declaration submitted on January 18, 2006 by Hiroyuki Yanagisawa.

It is the Examiner's position that the Declaration provided on January 18, 2006 and August 9, 2006 fails to overcome the rejections set forth above. First, there is no comparative data associated with the Declaration submitted on August 9, 2006. Therefore, the unexpected results asserted by the applicants cannot be determined. Second, the claimed invention is related to the regression line using deferent coordinates ( $L^* u^* v^*$ ) and ( $L^* a^* b^*$ ). However, the Declaration fails to clearly state whether the results shown in the Declaration are independent from the type of coordinates used in plotting. See the plotting in claims 1, 4 is related to optical densities 0.5, 1.0, 1.5 and minimum density. Claims 7 and 10 is related to the plotting using optical densities 0.5, 1.0, 1.5. The Declaration fails to state whether the plotting presented therein correspond to the use of the minimum density or without the use of the density. The Declarations being presented are silent with the coordinates and optical densities using in the plotting while the coefficient of the determination  $R^2$  of the regression line is critical to the claimed invention. In their response on June 26, 2006, the applicants argue that the system using coordinates ( $u^*, v^*$ ) and ( $a^*, b^*$ ) are well known and well recognize as different. However, the Declaration fails to show the results within the scope of each coordinate system. Third, the range of the coefficient of the determination  $R^2$  of the regression line from 0.998 to 1.0 is critical to the claimed invention. However, results shown in the Declaration such as January 18, 2006 is not commensurate with the scope of the claims. The value of the lower limit of 0.998 and the value of above 1.0 has not been shown. Therefore, the criticality of the whole range of 0.998 to 1.0 cannot be determined.



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Accordingly, it is believed that the invention as claimed still prima facie obvious over the combination of the applied prior art of record.

*Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *TH*  
September 28, 2006

*Thorl Chea*  
Thorl Chea  
Primary Examiner  
Art Unit 1752